In the course of a recent study, an opportunity arose to analyze the mineral by *x*-ray spectrography, using new methods developed for micro-size samples. The samples were selected from two specimens of the same locality, Wolfsberg, Harz, (UT R 63, R 64). Two separate aliquots of 50 and 100 milligrams were fused in potassium pyrosulphate ($K_2S_2O_7$) at 40:1 dilution. The mineral was analyzed by comparing the net peak intensity ratio of Pb/Sb to that obtained from synthetic samples prepared in an identical fashion from weighed amounts of Pb and Sb.

Results of the analysis of the two fused samples of zinckenite gave identical atomic ratios for Pb/Sb of exactly 6:14. The new *x*-ray analysis therefore clearly supports 12 [$6PbS.7Sb_2S_3$] as the most likely cell content for zinckenite.

This work was carried out in the Department of Geological Sciences, University of Toronto, as part of a Ph.D. research program. I wish to express my thanks to Professor E. W. Nuffield and the National Research Council who supplied Professor Nuffield with financial assistance to develop *x*-ray spectrographic analysis at the University of Toronto.

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NOTE ON THE OCCURRENCE OF EUDIALYTE IN CANADA[1]

Charles Milton
U. S. Geological Survey, Washington, D.C.

Hicks (1958) reports eudialyte (eucolite) from two Canadian localities; Hollinger, Pontiac County, Quebec, and Seal Lake, Labrador. He concludes "A search of the literature has failed to reveal any published data on Canadian occurrences of eudialyte and eucolite".

[1]Publication authorized by the Director, U.S. Geological Survey.

In the classic Memoir on the Haliburton and Bancroft Areas, Ontario, Adams & Barlow (1910) described "eucolite" from Egan Chute on the York River. I collected a number of small crystals of what were thought to be this mineral from that locality, but on mentioning this to the late Dr. T. L. Walker (in 1922), learned that the crystals described by Adams & Barlow had been identified by him as zircon, and that subsequent field and laboratory study had failed to verify Adams' & Barlow's report as to the presence of eucolite in the area.

Re-examination of the crystals then (and again recently by *x*-ray powder analysis) confirmed Dr. Walker's identification of zircon. The crystals, about 5 mm. in size, have a deceptive pseudo-hexagonal habit. Adams & Barlow mention "apparently low double refraction" (of "eucolite") as differentiating eucolite from garnet, which it resembles otherwise. Although altered zircon too sometimes shows low double refraction, these crystals, though somewhat turbid, appear to have normal optical properties.

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HEAZLEWOODITE IN THE PORCUPINE DISTRICT (ONTARIO)

A. J. Naldrett
Queen's University, Kingston, Ontario

Heazlewoodite (Ni_3S_2) has been identified in 6 samples from the serpentinized peridotite hanging wall of the old Alexo nickel mine. The mine is situated in Dundonald Township, 25 miles northeast of Timmins.

Heazlewoodite was first described by Petterd (1910) who considered it to be an iron-nickel sulphide, a variety of pentlandite. Peacock (1946) describes a sample from Tasmania that is thought to be from the type locality, Heazlewood. He gives its *x*-ray powder spectrum and shows that it has the unique chemical composition Ni_3S_2. Williams (1958) reports that it has also been identified in a serpentinite at Trial Harbour,